

JSR(R) (0100) Instruction Cycle

15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
0100				1	PCoffset11										

15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
0100				0	00	BR				000000					

Instruction Fetch

MAR $\leftarrow$ **PC**

PC $\leftarrow$ **PC** + 1

MDR $\leftarrow$ **memory**[**MAR**]

IR $\leftarrow$ **MDR**

Decode

IR[15:12] decoded

Evaluate Address

n/a

Operand Fetch

n/a

Execute

R7 $\leftarrow$ **PC**

PC $\leftarrow$ (**IR**[11] ? **PC** + **sign_ext**₁₆(**IR**[10:0]) : **R**_{**IR**[8:6]} + 0)

Store Result

n/a